

IV. AMENDMENT TO THE CLAIMS

Claims 1-9. (Canceled)

Claim 10. (Currently Amended) A ~~recombinant DNA construct~~ vector comprising

- (i) ~~a vector, and~~
- (ii) ~~the PAP DNA fragment of claim 1~~
the nucleic acid of claim 41.

Claim 11. (Currently Amended) A ~~recombinant DNA construct according to~~ The vector of claim 10, wherein said vector is an expression vector.

Claim 12. (Currently Amended) The ~~recombinant DNA construct according to~~ vector of claim 10; ~~wherein said vector~~ that is a prokaryotic vector.

Q4 Claim 13. (Currently Amended) The ~~recombinant DNA construct according to~~ vector of claim 10; ~~wherein said vector~~ that is a eukaryotic vector.

Claim 14. (Currently Amended) A host cell ~~transformed with a recombinant DNA construct according to~~ comprising the vector of claim 10.

Claim 15. (Currently Amended) A host cell ~~according to claim 14, wherein said cell of claim 14~~ that is a prokaryotic cell.

Claim 16. (Currently Amended) A host cell ~~according to claim 14, wherein said cell of claim 14~~ that is a eukaryotic cell.

Claims 17-40. (Canceled)

Claim 41. (New) An isolated nucleic acid comprising a nucleotide sequence selected from the group consisting of:

- (a) the nucleotide sequence as set forth in SEQ ID NO: 2;
- (b) a nucleotide sequence encoding the polypeptide as set forth in SEQ ID NO: 7;
- (c) a nucleotide sequence complementary to (a) or (b).

Claim 42. (New) An isolated nucleic acid comprising a nucleic acid sequence that is at least 90% identical to the sequence of the nucleic acid sequence of claim 41 and encodes a polypeptide that is capable of binding a peripheral-type benzodiazepine receptor (PBR).

Claim 43. (New) An isolated nucleic acid comprising a nucleic acid sequence that is at least 90% identical to the sequence of the nucleic acid sequence of claim 41 and encodes a polypeptide that is capable of regulating steroid biosynthesis.

Claim 44. (New) An isolated nucleic acid comprising a nucleic acid sequence that is at least 90% identical to the sequence of the nucleic acid sequence of claim 41 and encodes a polypeptide that is capable of mediating cholesterol delivery.

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Claim 45. (New) An isolated nucleic acid that encodes a polypeptide that is capable of binding a peripheral-type benzodiazepine receptor (PBR) and hybridizes to the complement of the nucleic acid of claim 41 under the following stringent conditions: a final wash in 0.1X SSC at 65°.

Claim 46. (New) An isolated nucleic acid that encodes a polypeptide that is capable of regulating steroid biosynthesis and hybridizes to the complement of the nucleic acid of claim 41 under the following stringent conditions: a final wash in 0.1X SSC at 65°.

Claim 47. (New) An isolated nucleic acid that encodes a polypeptide that is capable of mediating cholesterol delivery and hybridizes to the complement of the nucleic acid of claim 41 under the following stringent conditions: a final wash in 0.1X SSC at 65°.

Claim 48. (New) A process of producing a peripheral-type benzodiazepine-associated protein (PAP) comprising culturing the host cell of either claim 15 or 16 under suitable conditions to express a peripheral-type benzodiazepine-associated protein-7 (PAP-7) encoded by the nucleic acid.

Claim 49. (New) The process of claim 48, wherein the vector further comprises a heterologous promoter operatively linked to the nucleotide sequence encoding the peripheral-type benzodiazepine-associated protein-7 (PAP-7) polypeptide.

Claim 50. (New) A diagnostic reagent comprising a nucleic acid of claim 41, wherein the nucleic acid is detectably labeled.

Claim 51. (New) A diagnostic reagent comprising a single-stranded nucleic acid of claim 41, wherein the nucleic acid is complementary and is detectable labeled.

Claim 52. (New) A diagnostic reagent comprising a single-stranded nucleic acid of claim 41, wherein the nucleic acid amplifies peripheral-type benzodiazepine-receptor-associated protein-7 (PAP-7) sequences.

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Claim 53. (New) A vector comprising the nucleic acid of claim 42.

Claim 54. (New) A host cell comprising the vector of claim 53.

Claim 55. (New) A process of producing a peripheral-type benzodiazepine-receptor-associated protein (PAP) comprising culturing the host cell of either claim 54 under suitable conditions to express a peripheral-type benzodiazepine-receptor-associated protein-7 (PAP-7) encoded by the nucleic acid.

Claim 56. (New) A diagnostic reagent comprising a nucleic acid of claim 42, wherein the nucleic acid is detectably labeled.

Claim 57. (New) A vector comprising the nucleic acid of claim 43.

Claim 58. (New) A host cell comprising the vector of claim 57.

Claim 59. (New) A process of producing a peripheral-type benzodiazepine-receptor-associated protein (PAP) comprising culturing the host cell of claim 58 under suitable

conditions to express a peripheral-type benzodiazepine-receptor-associated protein-7 (PAP-7) encoded by the nucleic acid.

Claim 60. (New) A diagnostic reagent comprising a nucleic acid of claim 43, wherein the nucleic acid is detectably labeled.

Claim 61. (New) A vector comprising the nucleic acid of claim 44.

Claim 62. (New) A host cell comprising the vector of claim 61.

Claim 63. (New) A process of producing a peripheral-type benzodiazepine-receptor-associated protein (PAP) comprising culturing the host cell of claim 62 under suitable conditions to express a peripheral-type benzodiazepine-receptor-associated protein-7 (PAP-7) encoded by the nucleic acid.

64 Claim 64. (New) A diagnostic reagent comprising a nucleic acid of claim 44, wherein the nucleic acid is detectably labeled.

Claim 65. (New) A vector comprising the nucleic acid of claim 45.

Claim 66. (New) A host cell comprising the vector of claim 65.

Claim 67. (New) A process of producing a peripheral-type benzodiazepine-receptor-associated protein (PAP) comprising culturing the host cell of claim 66 under suitable conditions to express a peripheral-type benzodiazepine-receptor-associated protein-7 (PAP-7) encoded by the nucleic acid.

Claim 68. (New) A diagnostic reagent comprising a nucleic acid of claim 45, wherein the nucleic acid is detectably labeled.

Claim 69. (New) A vector comprising the nucleic acid of claim 46.

Claim 70. (New) A host cell comprising the vector of claim 69.

Claim 71. (New) A process of producing a peripheral-type benzodiazepine-receptor-associated protein (PAP) comprising culturing the host cell of claim 70 under suitable conditions to express a peripheral-type benzodiazepine-receptor-associated protein-7 (PAP-7) encoded by the nucleic acid.

Claim 72. (New) A diagnostic reagent comprising a nucleic acid of claim 46, wherein the nucleic acid is detectably labeled.

Claim 73. (New) A vector comprising the nucleic acid of claim 47.

Claim 74. (New) A host cell comprising the vector of claim 73.

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Claim 75. (New) A process of producing a peripheral-type benzodiazepine-receptor-associated protein (PAP) comprising culturing the host cell of claim 74 under suitable conditions to express a peripheral-type benzodiazepine-receptor-associated protein-7 (PAP-7) encoded by the nucleic acid.

Claim 76. (New) A diagnostic reagent comprising a nucleic acid of claim 47, wherein the nucleic acid is detectably labeled.
